

SR 99 Tunnel Project

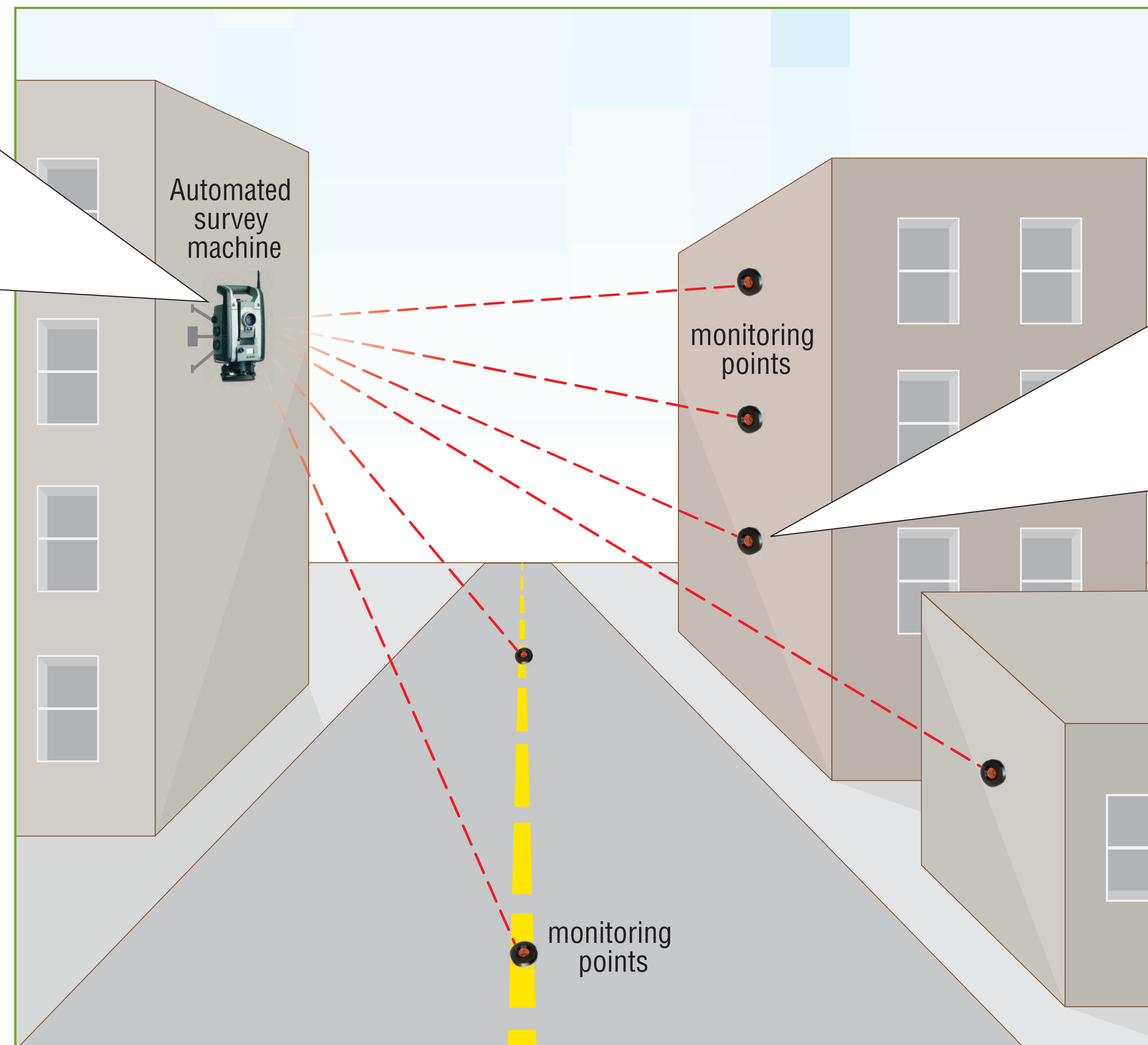
Monitoring Buildings During Construction

All buildings above the SR 99 tunnel route will have instruments installed to measure any movement before, during and after tunnel construction.

Automated Survey Machines

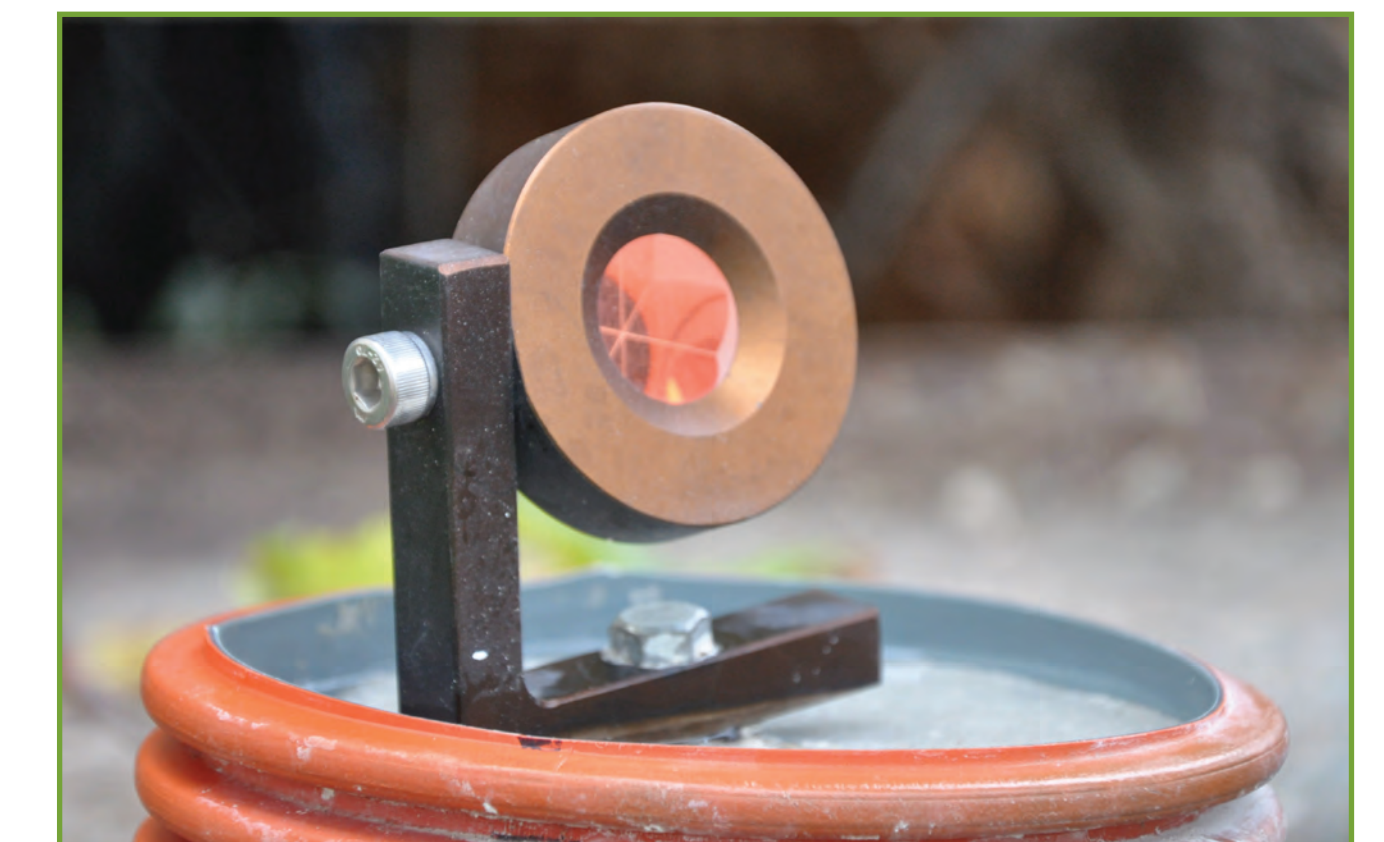


An automated survey machine is a 1-foot by 6-inch machine placed on a wall or rooftop.



Automated survey machines monitor building movement by continuously scanning predetermined points on adjacent buildings and in the street.

Monitoring Points



Monitoring points are typically 6-inch by 6-inch prisms mounted on buildings with a 2-inch long by 1/2-inch diameter screw.



Monitoring points can also be as small as the head of a nail.

Monitoring Buildings During Construction

A limited number of buildings along the SR 99 tunnel route will require monitoring equipment on their interiors. These sensors will electronically transmit any building movement to the project team.

Tiltmeter



A tiltmeter is a 3-inch by 12-inch device fastened to an interior wall with bolts or brackets.

Liquid Level Sensor



A liquid level sensor is a 6-inch by 3-inch device connected to a half inch diameter tube filled with water and mounted on a wall with bolts or brackets.

Crack Gauge



Small gauges measure changes in the size of existing building cracks.

SR 99 Tunnel Project

Building Monitoring Timeline

